

**RHODE ISLAND
STATE BUILDING CODE
International Residential Code
For
One and Two Family Dwellings
Regulation SBC-2
SEPTEMBER 1, 2002**

Delete Existing Regulation SBC-2-98

Dated April 1, 1998



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

**Department of Administration
BUILDING CODE STANDARDS COMMITTEE
One Capitol Hill
Providence, Rhode Island 02908-5859
(401) 222-3033
FAX NO (401) 222-2599**

1st EDITION

State Building Code
International Residential Code for One & Two Family Dwelling
Regulation SBC-2
September 1, 2002

The Building Code Standards Committee, in accordance with the rule making authority of Title 23, Chapter 23-27.3, Section 109.1, paragraph a through c inclusive hereby adopts the provisions of the International Residential Code 2000 edition, as published by the International Code Council, Inc., as the Rhode Island One & Two Family Dwelling Code, together with the amendments thereto hereinafter set forth to the chapters and sections of said code:

IRC 2000

Format: These Code changes follow numbering sequence and topics of IRC 2000 (1st printing). All provisions of IRC 2000 are retained unless indicated as deleted or revised. Published errata will be incorporated into the final documents.

Chapter 1

R101.1 Delete and substitute the following:

R101.1 Title. These provisions shall be known as the State Residential Code for One & Two Family Dwellings SBC-2-2001, and shall be cited as such and will be referred to herein as “this code”.

R101.2 Delete and substitute the following:

R101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one-and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with a separate means of egress, and their accessory structures.

R102.5 Delete and substitute the following:

R102.5 Appendices: A, B, C & D are informative only and not part of this code. Appendices E, G, H and K apply. Appendices F, I and J are deleted. New RI Appendix L is added.

R102.7 Delete and substitute the following:

R102.7 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as specifically covered in this code or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

R105.2 Delete R105.2 and substitute the following:

R105.2 Work exempt from permit. Permits shall not be required for the following. Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

Building:

1. One-story detached accessory structures provided the floor area does not exceed 64 square feet (18.58 m²).
2. Fences not over 6 feet (1829 mm) high.
3. Retaining walls that are not over 32" in height measured from the lower finished grade to the top of the wall, unless supporting a surcharge.
Exception:
 1. All cast-in-place concrete retaining walls greater than 24" in height shall require a permit.
 2. All engineered masonry retaining wall systems shall be installed in accordance with manufacturer's installation instructions.
 2. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallon (18 927L) and the ratio of height to diameter or width does not exceed 2 to 1.
 3. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade and not over any basement or story below.
 4. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
 5. Prefabricated swimming pools that are less than 24 inches (610mm) deep, and man-made landscape ponds of any depth.
 6. Swings and other playground equipment, and play structures less than 64 square feet.
 7. Window awnings supported by an exterior wall.
 8. Replacement window installations that leave the original frame intact.

Gas:

1. Replacement of any minor part or appliance that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation appliances.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.

Plumbing:

The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.

The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures. The replacement of defective hot water heaters, providing there is no alteration of existing wiring, piping or vents.

R105.3.1.1 Delete and substitute the following:

R105.3.1.1 Substantially improved or substantially damaged existing buildings or structures. For application for reconstruction, rehabilitation, addition, or other improvement of existing buildings or structures located in an area prone to flooding as established by Table R301.2 (1) and community FIRM documents, the value of the proposed work or repair shall be provided by the owner or authorized agent and reviewed by the Building Official. If the Building Official determines that the proposed work equals or exceeds 50% of the market value of the building or structure, the permit application will not be approved, unless the applicant files a request for specific variances or an appeal from the Building Official's decision. The Board of Appeals shall approve, deny or modify the appeal or request for variances and the decision shall be made part of the record for application and further enforcement.

R107 Add the following new section R107 Fabric Structures.

Section R107 Fabric Structures

R107.1 Fabric Structures: Fabric structures shall be located in accordance with applicable local zoning code provisions. Permits shall be required for any structure over 200 sq. ft. in area and shall be installed in accordance with manufacturer's installation instructions. Fabric structures over 200 sq. ft. in area but less than 400 sq. ft. in area shall have engineered wind anchors installed to withstand design wind loads and shall not remain in place for more than 6 months in any 12 consecutive month period. All structures over 400 sq. ft. and/or intended to be in place for more than a 12 month period, shall only be approved pending a satisfactory decision by the local Building Code Board of Appeals, unless full code compliance for permanent structures in all respects is demonstrated to the satisfaction of the local building official.

R110.2 Delete R110.2 and substitute the following:

R110.2 Change of Use. Change of use shall only be made in accordance with the provisions of the State Rehabilitation Code.

Add the following section R115:

R115 Other

R115.1 Other Administrative issues. The remainder of the administrative provisions of RI GL 23-27.3-100 et al are incorporated by reference into the balance of this Chapter 1 Administration.

Delete the following sections and refer to appropriate Sections of Article 1 SBC-1 and GL 23-27.3-100 et al.

R103.1, R103.2, R103.3, R104.6, R104.7, R104.8, R104.10, R105.2.2, R105.3.1, R105.3.2, R105.4, R105.5, R105.6, R105.7, R106.3.1, R106.3.2, R106.3.3, R106.5, R107.1, R107.2, R107.3, R107.4, R108.1, R108.2, R108.3, R108.4, R108.5, R112.1, R112.2, R112.2.1, R112.2.2, R112.3, R112.4, R113.1, R113.2, R113.3, R113.4, R114.1, R114.2.

Retain the following Sections:

R101.3, R102.1, R102.2, R102.3, R102.4, R102.6, R102.7.1, R104.1, R104.2, R104.3, R104.4, R104.5, R104.9, R104.9.1, R104.10.1, R104.11, R104.11.1, R105.1, R105.2.1, R105.2.3, R105.3, R105.8, R106.1, R106.1.1, R106.1.2, R106.1.3, R106.2, R106.3, R106.4, R109.1, R109.1.1, R109.1.2, R109.1.3, R109.1.4, R109.1.5, R109.1.5.1, R109.1.6, R109.2, R109.3, R109.4, R110.1, R110.3, R110.4, R111.1, R111.2, R111.3.

Delete the following without substitution:

R110.5.

Chapter 2

To Chapter 2 Definitions add the following:

Fabric Structure: Structures utilizing wood, metal or plastic frames and covered with cloth, canvas, or plastic material, excluding tents, agricultural greenhouses, and furnishings such as umbrellas, awnings or portable shade canopies, and accessory to the residential use of the primary structure. If used for non-residential accessory use, see SBC-1-1998.

Chapter 3

R301.2 Delete and substitute the following:

R301.2 Climatic and geographic designs criteria. Buildings shall be constructed in accordance with the provisions of this code. Additional criteria is established and set forth in Table R301.2 (1)

Table R301.2(1) Delete and substitute the following:

Table R301.2(1)

Ground Snow Load	Wind	Seismic Design Criteria	
30psf	See figure R301.2(1)	None ⁴	
Weathering	Frost line depth^{2,3}	Termite	Decay
Severe	40"	Moderate to Heavy	Slight to Moderate
Winter design Temp	Flood Hazards		
9°	Yes (see Community FIRMS)		

NOTES:

1. Roof live load and roof snow load are not additive
2. New Shoreham frost depth is 30"
3. Requirements for frost depth footings for accessory attached and detached structures are as follows:
 - a. Structures and detached accessory buildings of 0-199 sq. feet do not require any frost depth foundations or footings. Two ground screw anchors or other means approved by the building official shall be provided to resist overturning.
 - b. Accessory attached structures such as decks, platforms or landings shall have footings extending to 3'-4" below grade. Exterior stairs and steps off decks, balconies and platforms greater than 30" above grade shall have stringer supports extending to 12" below grade, and shall be supported and secured to prevent lateral displacement or vertical collapse due to grade changes.
4. Seismic design criteria is not required for buildings and structures regulated by this code.

R301.2.1 Delete and substitute the following:

R301.2.1 Wind limitations. Buildings and portions thereof shall be limited by wind speed, as defined in Table R301.2(1), and construction methods in accordance with this code. Basic wind speeds shall be determined from Table R301.2(1) and Figure R301.2(1). Where different construction methods and structural materials are used for various portions of a building, the applicable requirements of this sections for each portion shall apply. Where loads for windows, skylights and exterior doors are not otherwise specified, the loads listed in Table R301.2(2) adjusted for height and exposure per Table R301.2(3), shall be used to determine design load performance requirements for windows and doors.

R301.2.1.1 Delete and substitute the following:

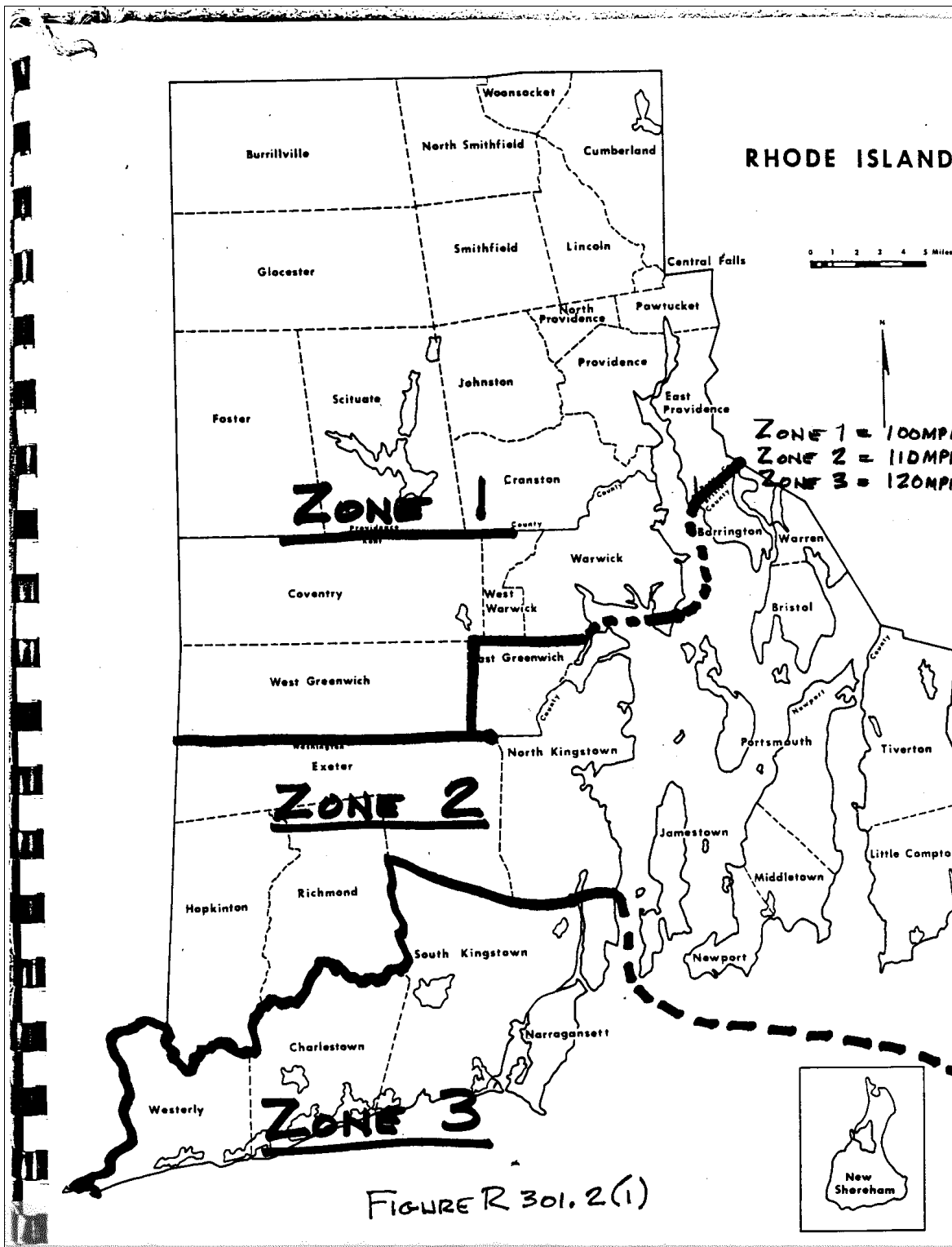
R301.2.1.1 Design criteria. Construction in regions where the basic wind speeds from Figure R301.2(1) equal or exceed 110 miles per hour (177.1 km/h) shall be designed in accordance with one of the following.

1. American Forest and Paper Association (AF&PA) Wood Frame Construction Manual for One- and Two-Family Dwellings (WFCM); or
2. Southern Building Code Congress International Standard for Hurricane Resistant Residential Construction (SSTD 10); or
3. Minimum Design Loads for Buildings and Other Structures (ASCE-7);
4. Cold-formed steel construction shall be designed in accordance with the provisions of this code.
5. For all communities located in the 110 MPH and 120 MPH wind zones, the prescriptive criteria in Appendix L may be used for buildings and structures in lieu of items 1-3 above:

Exceptions to item 5:

1. Buildings and structures of any size in 110 MPH or 120 MPH wind zones located in a V zone as determined by community FIRMS.
2. Two or more story buildings and structures of any size located in 120 MPH wind zone with more than 20% exterior fenestration.
3. Two or more story structures with a building height greater than 33' as measured from Grade Plane to the average height of the highest roof surface.
4. Any two or more story structure or building with opening fenestration greater than 40% on any one wall.

R301.2.1.2 Delete without substitution.



R303.3 Delete and substitute the following:

303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.279 m²), one-half of which must be openable.

Exception: The glazed areas shall not be required where artificial light and an approved mechanical ventilation system capable of producing a change of air every 12 minutes are provided. Bathroom exhausts shall be vented directly to the outside. The minimum size exhaust fan capacity shall be 50 cfm (85 cfm for bathrooms with shower heads).

R303.4 Delete section R303.4 and substitute the following.

R303.4 **Stairway illumination.** Except for bulkhead-covered stairs from basements, all interior and exterior stairways shall be provided with a means to illuminate the stairs, including the landings and treads. Interior stairways shall be provided with an artificial light source located in the immediate vicinity of each landing of the stairway. Exterior stairways shall be provided with an artificial light source located in the immediate vicinity of the top landing of the stairway. Exterior stairways providing access to a basement from the outside grade level shall be provided with an artificial light source located in the immediate vicinity of the bottom landing of the stairway.

Exception: An artificial light source is not required at the top and bottom landing, provided an artificial light source is located directly over each stairway section.

R303.6 Delete without substitution

R308.4 Delete R308.4 item #9 and substitute the following:

9. Glazing in walls enclosing stairways and landings when the glazing is within 18" of the railing and the bottom edge of the glazing is less than 60" above the walking surface.

R305.1 Delete R305.1 and substitute the following:

R305.1 Minimum Height. Habitable rooms, except kitchens, shall have a ceiling height of not less than 7 feet 6 inches (2286 mm) for at least 50 per cent of their required areas. Not more than 50 percent of the required area may have a sloped ceiling less than 7 feet 6 inches (2286 mm) in height with no portion of the required area less than 5 feet (1524 mm) in height. If any room has a furred ceiling, the prescribed ceiling height is required for at

least 50 percent of the area thereof, but in no case shall the height of the furred ceiling be less than 7 feet (2134 mm)

Exceptions:

1. Beams and girders spaced not less than 4 feet (1219 mm) on center may project not more than 6 inches (153 mm) below the required ceiling height.
2. All other rooms including kitchens, baths and hallways may have a ceiling height of not less than 7 feet (2134 mm) measured to the lowest projection from the ceiling.
3. Ceiling heights in basements without habitable spaces may not be less than 6 feet 8 inches (2032 mm) clear except for under beams, girders, ducts or other obstructions where the clear height shall be 6 feet 4 inches (1931 mm).
4. Habitable basements used only as recreation rooms shall have a ceiling height of not less than 7 feet, except for under beams, girders, ducts and soffits, etc. where the clear height shall be not less than 6'-4".
5. Existing basements renovated for habitable rooms except sleeping areas shall have a minimum ceiling height of 6'-8" except for under beams, girders, ducts, soffits where the clear height shall be not less than 6'-4". The required ceiling height of 6'-8" shall occur over a minimum of 50% of the actual room area.

R307 Add the following new subsection

R-307.3 Privacy required. Every water closet, bathtub or shower required by this code shall be installed in a room which will afford privacy to the occupant.

R309.3 Delete IRC R309.3 and substitute 309.3 as follows:

R309.3 Floor Surface: Garage and carport floor surfaces shall be of approved noncombustible material. That area of floor used for parking of automobiles or other vehicles shall be sloped to facilitate the movement of liquids toward the main vehicle entry doorway. Where approved by the building official, other means of dispersing spilled liquids from the area may be used to prevent the flow of liquids through doorways into adjoining enclosed areas of dwelling.

Exception: Floor drains must discharge to open finish grade only.

The sills of all door openings between the garage and adjacent interior spaces shall be raised not less than two inches from above the garage floor, or the garage floor shall be installed at a lower elevation so as to provide a minimum four inch step into the adjacent space.

R310.1 Delete R310.1 and substitute the following:

R310.1 Emergency escape and rescue required. Basements with habitable space and every sleeping room shall have at least one openable emergency escape and rescue window or exterior door opening for emergency escape and rescue. Where openings are provided as a means of escape and rescue they shall have a sill height of not more than 44 inches (1118 mm) above the floor. Where a door opening having a threshold below the adjacent ground elevation serves as an emergency escape and rescue opening and is provided with a bulkhead enclosure, the bulkhead enclosure shall comply with Section R310.3. The net clear opening dimensions required by this section shall be obtained by the normal operation of the window or door opening from the inside. Escape and rescue window openings with a finished sill height below the adjacent ground elevation shall be provided with a window well in accordance with Section R310.2.

Exception: Basements with habitable space not used for bedrooms shall not require an emergency escape under any one of the following two conditions:

1. Residential sprinkler systems conforming to NFPA 13D latest edition shall be installed throughout all areas of the basement or cellar, or
2. Fuel-fired equipment shall be separated from the habitable room and means of egress with one (1) hour rated construction and 20 minute rated opening protectives.

R310.1.1 Delete R310.1.1 and substitute the following:

R310.1.1 Minimum opening area. All emergency and rescue openings shall have a minimum net clear opening of 4.4 square feet. Where the net clear opening dimensions specified below can be met only with window sashes easily removable without the use of keys, tools or excessive force, the net clear opening shall be 5.7 square feet.

R310.5 Add the following new section R310.5

R310.5 Basement or Cellar Windows: Except as may be otherwise provided for habitable or occupiable rooms, at least two (2) operable windows 12" x 32" nominal size shall be installed reasonably remote from each other. Security devices shall not unreasonably impede the use of these windows for light, ventilation or firefighting purposes.

R311.4 Delete and substitute the following:

R311.4 Hallways. The minimum width of a hallway shall be not less than 3 feet. Baseboard, casings and other trim shall not reduce the required width to less than 34-1/2".

R314.2 Delete IRC R314.2 and substitute the following:

314.2 Treads and risers. The maximum riser height shall be 8-1/4 inches (228 mm) and the minimum tread depth shall be 9 inches. The riser shall be measured vertically between leading edges of the adjacent treads. The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The walking surface of treads and landings of a stairway shall be sloped no steeper than one unit vertical in 48 units horizontal (2 percent slope). The greatest riser height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). The greatest tread depth within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm).

Delete IRC R314.2.1 and replace with the following:

314.2.1 Profile. The radius of curvature at the leading edge of the tread shall be no greater than 9/16 inch (14.3 mm). A nosing not less than 3/4 inch (19.1 mm) but not more than 1-1/4 inches (32 mm) shall be provided on stairways with solid riser. The greatest nosing projection shall not exceed the smallest nosing projection by more than 3/8 inch (9.5mm) between two stories, including the nosing at the level of floors and landings. Beveling of nosing shall not exceed 1/2 inch (12.7 mm). Risers shall be vertical or sloped from the underside of the leading edge of the tread above at an angle not more than 30 degrees from the vertical. Open risers are permitted.

Exception: A nosing is not required where the tread depth is a minimum of 11 inches (279 mm).

R314.10 Add the following new section:

R314.10 Attic and other Pull-Down Types of Stairs: Pull-down types of stairs shall not be required to meet the provisions of sections 314, 315 and 316.

R315.1 Delete R315.1 and substitute the following:

R315.1 Handrails. Handrails having minimum and maximum heights of 34 inches and 38 inches (864 mm and 965 mm), respectively, measured vertically from the nosing of the treads, shall be provided on at least one side of stairways. All required handrails shall be continuous the full length of the stairs with three or more risers. Ends shall be returned or shall terminate in newel posts or safety terminals. Handrails adjacent to a wall

shall have a space of not less than 1.5 inches (38mm) between the wall and the handrail.

Exceptions:

1. Handrails shall be permitted to be interrupted by a newel post at a turn.
2. The use of a volute, turnout or starting easing shall be allowed over the lowest tread.
3. Newel posts shall be permitted at the top and bottom and at intermediate points of each stair flight.

R316.3 Add new section as follows:

R316.3 Seat or Bench Elements. Guardrails which incorporate seat or bench elements shall have a guardrail system complying with R316.2 to a height of 36" measured from the seat surface. The guardrail system shall also extend to the floor surface below the bench or seat element.

Exception: 1. Porches, balconies or raised floors 30" or less above the floor or grade below.
2. Freestanding moveable seat and bench elements

R317 Delete R317 Smoke Alarms and substitute the following:

Provisions for Fire Detection Systems are contained within the Rhode Island Fire Safety Code Chapter 28-34 (Text Available as of March 1, 2001 is reprinted below for informational purposes only and is not part of this code.

CHAPTER 28.34
FIRE DETECTION SYSTEMS

SECTION:

23-28.34-1. Fire detection systems required
23-28.34-2. Minimum number of detectors
23-28.34-3. Location of detectors.
23-28.34-4. Power supply and wiring methods.

SECTION.

23-28.34-5. Enforcement
23-28.34-6. Homeowners responsible
23-28.34-7. Penalty.

23-28.34-1. Fire detection systems required.—All buildings hereinafter constructed or converted for residential occupancy shall be equipped with a smoke detection system listed and/or approved by the underwriters laboratories, inc., or factory mutual, installed according to standards set forth below, except that the systems shall not be required in buildings or structures subject to the provisions of the general laws relative to the installation of automatic fire warning systems connected thereto.

History of Section.

P.L. 1976 ch. 238 § 1; P.L. 1992, ch. 91, § 1.

Reenactments. The 1989 Reenactment (P.L. 1989, ch. 542, § 1) substituted "the systems" for "such systems" near

Comparative Legislation. Smoke detectors:

Conn. Gen Stat. §§ 29-292.

Mass. Ann. Laws, ch. 148, § 26C et seq.

Collateral References. Liability of person furnishing, installing, or servicing burglary or fire alarm system for burglary

the middle of the section, and made several capitalization changes near the middle of the section.

or fire alarm system for burglary or fire loss. 37 A.L.R. 4th 47.

23-28.34-2 Minimum number of detectors.-- (a) A minimum of one approved smoke detector shall be located in the highest habitable level and on each floor, level, or story. (b) For any floor, level, or story exceeding twelve hundred square feet (1200 sq. ft.) in area, one approved smoke detector shall be provided for each twelve hundred square feet (1200 sq. ft.) or portion thereof or as specified by the manufacturer for the particular device.

History of Section.

P.L. 1976, ch. 238, § 1; P.L. 1992, ch. 91, § 1.

Reenactments. The 1989 Reenactment

(P.L. 1989, ch. 542, § 1) made several minor stylistic changes throughout the section.

23-28.34-3. Location of detectors.-- (a) Approved smoke detectors shall be located outside each separate sleeping area in the immediate vicinity of the bedrooms and on each additional story of the living unit including basements and cellars and excluding crawl spaces and uninhabitable attics. Bedrooms, or sleeping rooms, separated by other use areas, such as kitchens or living rooms, but not bathrooms, shall require a separate smoke detector. (b) In basements or cellars, smoke detectors shall be located within twenty-four inches (24") of the base of stairways with solid risers and treads and side enclosed from the top of the stairway to the basement floor in addition to any other detector requirements for that level. (c) In basements or cellars with an open stairway, smoke detectors shall be located at the top of the stairway in addition to any other detector requirements for that level. (d) All detectors shall be mounted on the ceiling.

History of Section.

P.L. 1976, ch. 238, § 1; P.L. 1991, ch. 67, § 57; P.L. 1992, ch. 91, § 1.

Reenactments. The 1989 Reenactment

(P.L. 1989, ch. 542, § 1) made capitalization change in subsection (a).

23-28.34-4. Power supply and wiring methods.—(a) For all detection systems, a one-hundred and twenty (120) AC primary source of electric power with battery back-up shall be taken from a dependable light and power supply source. The wiring to each detector shall be taken from a branch lighting circuit serving a habitable area. The power source for the detectors shall be on the supply side ahead of any switches and not on circuits protected by a ground fault circuit interrupter. (b) All required detectors shall be provided with a visible intermittent or steady “power on” indicator and shall be inter-connected so that when one detector is actuated all detectors will sound and emit an audible signal having minimum rating of 85 dBA at 10ft. (c) All smoke detector systems shall be tested in accordance with the manufacturer’s recommendation. (d) Combination smoke/heat or fire/burglar systems meeting the requirements of § 23-28.34-3 and chapters 4 and 5 of N.F.P.A. standard 74, 1989 edition may be used. (e) The appendices of N.F.P.A. 74, 1989 edition may be used for informational purposes only.

History of Section.

(P.L. 1989, ch. 542, § 1) made capitalization

P.L. 1976, ch. 238, § 1; P.L. 1991, ch. 67 §58; P.L. 1992, ch. 91, § 1.
Reenactments. The 1989 Reenactment

change near the beginning of subsection (b), and deleted “§ 2-2-3” at the end of subsection (b).

23-28.34-5. Enforcement. –The local fire authorities certified by the State Fire Marshal as prescribed by § 23-28.2-6 in cooperation with the building code officials shall enforce the provisions of this chapter.

History of Section.

P.L. 1976, ch. 238, § 1; P.L. 1992, ch. 91, § 1.

23-28.34-6. Homeowners responsible.— It shall be the responsibility of the homeowner to maintain in operable condition smoke detection systems, installed as required pursuant to this chapter.

History of Section.

P.L. 1976, ch. 238, § 1.

23-28.34-7. Penalty. –Any owner of a building or structure who fails to comply with the provisions of this chapter shall be punished by a fine of not more than five hundred dollars (\$500).

History of Section.

P.L. 1976, ch. 238, § 1.

R323.1.2 Delete IRC R323.1.2 and substitute the following:

R323.1.2 Geographical areas. Approved naturally durable or pressure-treated wood shall be used for those portions of wood members which form the structural supports of buildings, balconies, porches, or similar permanent building appurtenances when such members are exposed to the weather without adequate protection from a roof, eave, overhang or other covering which would prevent moisture or water accumulation on the surface or at joints between members. Depending on local experience, such members may include:

1. Horizontal members such as girders, joists and decking.
2. Vertical members such as posts, poles and columns.
3. Both horizontal and vertical members.

R324.3 Delete IRC R324.3 and renumber 324.3.1 to R324.3.

R327.1 Delete R327.1 and substitute the following:

R327.1 General. All buildings and structures erected in areas prone to flooding as identified in Table R301.2(1) and classified as either flood hazard areas (including A Zones) or coastal high hazard areas (including V-

Zones) shall be constructed and elevated as required by the provisions contained in this section, SBC-1-1612 and ASCE 24-98.

Exception: All buildings and structures erected in identified floodways as established in Table R301.2(1) shall be designed and constructed as stipulated in SBC-1-1612 and ASCE 24-98.

R327.3.5 Delete and substitute the following:

R327.3.5 Flood Hazard Certificates.

R327.3.5 Flood Hazard Certificates. The following certifications shall be submitted to the building official:

1. For construction in flood hazard areas not subject to high-velocity wave action:
 - 1.1 As part of the lowest floor elevation requirements of Section 327.1.9, certification of the elevation of the lowest floor, including basement.
 - 1.2 For fully enclosed areas below the design flood elevation where provisions to allow for the automatic entry and exit of floodwaters do not meet the minimum requirements in Section 2.6.1.1, ASCE 24, certification by a registered design professional that the design will provide for equalization of hydrostatic flood forces in accordance with Section 2.6.1.2, ASCE 24-98.
2. For construction in flood hazard areas subject to high-velocity wave action:
 - 2.1 As part of the lowest floor elevation requirements Section 327.1.9, a certification of the elevation of the lowest horizontal structural member.
 - 2.2 A certificate prepared by a registered design professional that the building is designed in accordance with ASCE 24-98, including that the pile or column foundation and building or structure to be attached thereto is designed to be anchored to resist flotation, collapse and lateral movement due to the effects of wind and flood loads acting simultaneously on all building components, and other load requirements of R327.1.1.
 - 2.3 For breakaway walls designed to resist a nominal load of less than 10 pounds per square foot (0.48 kN/m^2) or more than 20 pounds per square foot (0.96 kN/m^2), a certificate prepared by a registered design professional that the breakaway wall is designed in accordance with ASCE 24-98.

R327.4 Add the following new Sections:

R327.4 Variances and appeals.

The Board of Appeals after examining the applicant's hardships shall approve or disapprove a variance request and shall hear and decide appeals from the requirements of these regulations, in accordance with the procedures of Section 23-27.3-127.0 of the Rhode Island State Building code and following:

(A) Board of Appeals

The local (or state) Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Building Official in the enforcement or administration of these regulations.

(B) Conditions of Acceptance:

- (1) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of the State Inventory of Historic Places, without regard to the procedures set forth in this Section.
- (2) Variances may be issued for new construction and substantial improvements to be erected on a lot of one half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level in conformance with the procedures of paragraphs B (3) (4) (5) and (6) of this Chapter.
- (3) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (4) Variances shall only be issued upon (1) a showing of good and sufficient cause, (2) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (3) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
- (5) Any applicant to whom a variance is granted shall be given notice in the written decision from the Board of Appeals that the structure will be permitted to be built with a lowest floor elevation X feet below the base flood elevation.
- (6) The Board of Appeals shall notify the applicant in the written decision that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurances up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variances actions, including justification for their issuance. All such variances issued shall be reported in the community's Annual Report to the Federal Insurance Administration.
- (7) Variances shall not be issued by a community within any designated regulatory floodway, if any increase in flood levels during the base discharge would result. (For communities which must meet the requirements of Section 60.3 (d) of the National Flood Insurance Program regulations).

- (8) Upon receipt of an application for a variance the Chairman of the Board of Appeals shall forward a copy of said application to the Rhode Island Emergency Management Office, Statewide Flood-Plain Coordinator.

Chapter 4

R401.3 Delete IRC R401.3 and substitute the following:

R401.3 Drainage. Lots shall be graded so that additional accumulation of surface water does not occur across adjoining property. Surface drainage shall be diverted to a storm sewer conveyance or other point of collection so as not to create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of 6" (inches) (153 mm) within the first 10 feet (3048 mm).

Exception. Where lot lines, walls, slopes or other physical barrier prohibit 6 inches (153 mm) of fall within 10 feet (3048 mm), drains or swales shall be provided to ensure drainage away from the structure.

Table R401.4.1 Delete IRC Table R401.4.1 and substitute the following:

Table R401.4.1

Presumptive Load-Bearing Values of Foundation Materials

Type of Soil	Load Bearing Pressure (psf)
Crystalline Bedrock	12,000-20,000 psf
Sedimentary and Foliated Rock	8,000-12,000 psf
Medium Dense-to-Dense Sandy Gravel and Gravel	4,000 psf
Medium Dense-to-Dense well-graded Sand, Silty Sand and Silty Gravel	3,000 psf
Firm Fine Sand, Silty Sand and Silty Gravel	1,500 psf
Loose Fine Sand, Silty Sand, organic soils, clay And areas suspected at being filled	1,000 psf

Table R402.2 Delete Table R402.2 and substitute the following:

TABLE NO R-402.2
MINIMUM SPECIFIED COMPRESSIVE
STRENGTH OF CONCRETE

LOCATION	MINIMUM f'_c OF CONCRETE AT 28 DAYS
Basement and foundation walls, continuous and isolated footings, basement and garage slabs.	2500 psi
*Exterior slabs, walks and steps exposed to weather	3000 psi

*Exterior slabs at 3,000 psi shall be air-entrained concrete.

R403.1.6 Delete R403.1.6 and R403.1.6.1 and substitute the following:

R403.1.6 General Foundation Anchorage. Foundation sill plates at exterior walls shall be anchored to the foundation as follows:

1 + 2story buildings – ½” @ 48” o/c or
5/8” @ 72” o/c

3 story building - ½” @ 24” o/c or
5/8” @ 36” o/c

Bolts shall be spaced not more than 12” from the corners. Bolts shall extend a minimum of 15” into masonry or 7” into concrete. Sill plates shall be protected from decay in accordance with Section R323. Nuts and washers shall be tightened on each bolt to the plate and shall not be recessed or countersink into the first plate. Bolts shall be high enough to allow for full engagement of the nut and nuts shall be left exposed for inspection at the framing stage of construction.

Exception: Foundation anchor straps, spaced as required to provide equivalent anchorage to ½” diameter anchor bolts.

R403.1.6.1 Braced Panel Anchorage. Shear walls shall be anchored to the foundation in accordance with Appendix L or the reference standards in R301.2.1.1. The shear wall connections shall be in addition to general foundation anchorage requirements.

R403.1.7. Delete Section R403.1.7_without substitution.

R403.3 Delete R403.3 and substitute the following:

R403.3 Frost protected shallow foundations. For buildings where the monthly mean temperature of the building is maintained at a minimum of 64° (18 °c), footings are not required to extend below the frost line when protected from frost by insulation in accordance with Figure R403.3(1) and Table R403.3. The air freezing index (°F-days) is 2000 for the entire State of Rhode Island.

Exceptions:

1. No foundation not so protected may be attached to frost-protected shallow foundations.
2. Unheated garages, porches, utility rooms and carports shall not be permitted to be attached to dwelling units with frost-protected shallow foundations.
3. The use of frost-protected shallow foundations shall be limited to 1 story buildings a maximum of 16' from average grade to topmost part of main roof.

Materials used below grade for the purpose of insulating footings against frost shall be labeled as complying with ASTM C578.

Figure R403.3(1) Amend Figure R403.3(1) as follows:

1. Change (12" max) to (8" min to 12" max)
2. Change 12" min dimension to read 12" min from top of grade to bottom of footing.

R403.3.1 Delete and substitute the following:

R403.3.1 Protection of vertical insulation. Vertical insulation shall be protected from damage for its full height from above grade to below grade by use of cementitious board, plywood rated for below ground use or other approved impact-resistant materials attached directly to the surface of the insulation. A continuous metal flashing termite barrier shall be installed under the sill plate at the top of the concrete slab and wall and vertical insulation edge and left exposed at the exterior. All anchor bolt penetrations shall be sealed.

Table R404.1.1(1) Editorial no "H"

R404.1.6 Delete section R404.1.6 and substitute the following:

R404.1.6 Height above finished grade. Concrete and masonry foundation walls shall extend above the finished grade adjacent to the foundation at all points a minimum of 8". Masonry veneers supported on a shelf or other approved means shall be permitted to extend below grade.

R404.4.9 Delete and substitute the following:

R404.4.9 Height above finished ground. ICF foundation walls shall extend above the finished ground adjacent to the foundation at all points a minimum of 8 inches. Masonry veneers supported on a shelf or other approved means shall be permitted to extend below grade.

R406.1 Typo in R406.1 should be R406.2

Chapter 5

R502.3.1 and R502.3.2 Change 10 psf dead load to 20 psf dead load.

Chapter 6

R602.10 Delete and substitute the following:

Wall bracing. Walls shall be braced in accordance with this section.

Exception: Structures subject to the scope limitations of Appendix L shall be permitted to be braced in accordance with Appendix L in lieu of the provisions of this section.

R613.4 & R613.7 Delete identical sections without substitution

Chapter 7

Table R703.4 Amend the Table R703.4 as follows:

Change column note at vinyl siding to read "yes" (sheathing paper is required). Add footnote "s", after footnote "n" of vinyl siding. Add footnote "s" as follows:

S. Vinyl wall siding shall be installed over an approved weather-resistant sheathing paper or membrane, sound existing weather-resistant siding or approved leveling insulating board. Under no circumstance is vinyl siding to be installed directly to studs, or directly to wall sheathing without sheathing paper or membrane specified in R703.2.

R703.10 Add the following:

703.10 Residing Exterior Walls. Materials and methods of application used for residing or replacing an existing wall covering shall comply with the requirements of Section R-703. New Exterior side wall covering shall not be installed without first removing existing wall coverings when any of the following conditions occur:

1. When the existing wall or wall covering is water-soaked or has deteriorated to the point that the existing wall or wall covering is not acceptable as a base for additional covering.
2. When the existing wall has three (3) or more applications of any wall covering.

Exception: The total number of wall coverings shall not be limited when any of the existing wall coverings consist of asbestos cement board or asbestos cement shingles or any protective encapsulating or protective siding/layer immediately over the asbestos material.

Asbestos cement board or asbestos cement shingles and any protective encapsulating layer thereupon shall not be required to be removed unless the existing wall is unacceptable for use as a base for additional layers of wall covering.

Any disturbance, repair or removal of existing asbestos cement board or asbestos cement shingles shall be in accordance with all State and Federal regulations.

Chapter 8

R802.11 Delete and substitute the following:

R802.11 Roof Tie-Down. Roof assemblies subject to wind uplift pressures of 20 pounds per square foot or greater as established in Table R301.2(2), adjusted for height and exposure per Table R301.2(3), shall have rafter or truss ties provided at bearing locations as follows:

R802.11.1 Trusses: Trusses shall have ties to top wall plates in accordance with minimum uplift design loads provided by the truss manufacturer.

R802.11.2 Rafters: Rafters shall have ties at the wall plate and ridge bearing points in accordance with Appendix L.

R807.1 Add the word “closet” after the word “hallway” on line 7 paragraph 2.

Chapter 9

R905.2.6 Delete IRC R905.2.6 and substitute the following:

R905.2.6 Attachment. Asphalt strip shingles shall have a minimum of six fasteners per shingle.

Exceptions:

1. Where the roof slope exceeds 20 units vertical in 12 units horizontal (20:12), special fastening details may be required by the manufacturer.
2. Fastening systems tested by the manufacturer to 110 MPH shall be permitted to be installed.

R905.2.7.2 Delete without substitution

R905.2.8.2.3 Delete and substitute the following:

3. For closed valleys (valley covered with shingles), valley lining of one ply of smooth roll roofing complying with ASTM D224 Type II or Type III and at least 36 inches (914 mm) wide or valley lining as described in Items 1 and 2 above shall be permitted. Specialty underlayment complying with ASTM D 1970 may be used in lieu of the lining material. Other valley lining systems and techniques acceptable to the shingle manufacturer shall be approved by the Building Official.

Chapter 10

Table R1003.1 and Figure R1003.1 Delete line item N and delete figure note regarding 1-1/2" min. grout.

R1001.15 Exc.#3 Delete IRC R1001.15 Exc. #3 and substitute the following:

3. Exposed combustible trim and the edges of sheathing materials such as wood siding, drywall and flooring shall be permitted to abut the masonry chimney sidewalls in accordance with Figure R 1001.15.

R1003.12 Exc. #3 Delete IRC R1003.12 Exc. #3 and substitute the following:

1. Exposed combustible trim and the edges of sheathing materials such as wood siding drywall and flooring shall be permitted to abut the masonry chimney sidewalls in accordance with Figure R 1003.12.

R-1006.0 Room Heaters (Wood/Coal Stoves)

1006.1 General: Solid-fuel-burning room heaters shall be tested in accordance with UL 1482 listed in Appendix A of the RI Mechanical Code.

1006.2 Multiple fuel-flue installations: A solid-fuel-burning room heater shall not connect to a chimney passageway venting another appliance.

1006.3 Used or antique stoves and room heaters: The Building Official shall permit the installation and use of non-listed or tested stoves and heaters when installed in accordance with the provisions of Table 1006.3 as follows:

**Table 1006.3
CLEARANCE REDUCTION METHODS**

TYPE OF PROTECTIVE ASSEMBLY ^a	REDUCED CLEARANCE WITH PROTECTION (inches) ^a							
	Horizontal combustible assemblies located above the heat source				Horizontal combustible assemblies located beneath the heat source and all vertical combustible assemblies			
	Required clearance to combustibles without protection (inches) ^a				Required clearance to combustibles without protection (inches) ^a			
	36	18	9	6	36	18	9	6
Galvanized sheet metal, minimum nominal thickness of 0.024 inch (No. 24 Gage), mounted on 1-inch glass fiber or mineral wool batt reinforced with wire on the back, 1 inch off the combustible assembly	18	9	5	3	12	6	3	3
Galvanized sheet metal, minimum nominal thickness of 0.024 inch (No. 24 Gage), spaced 1 inch off the combustible assembly	18	9	5	3	12	6	3	2
Two layers of galvanized sheet metal, minimum nominal thickness of 0.024 inch (No. 24 Gage), having a 1-inch airspace between layers, spaced 1 inch off the combustible assembly	18	9	5	3	12	6	3	3
Two layers of galvanized sheet metal, minimum nominal thickness of 0.024 inch (No. 24 Gage), having 1 inch of fiberglass insulation between layers, spaced 1 inch off the combustible assembly	18	9	5	3	12	6	3	3
½-inch inorganic insulating board, over 1 inch of fiberglass or mineral wool batt, against the combustible assembly	24	12	6	4	18	9	5	3
3½-inch brick wall, spaced 1 inch off the combustible wall	—	—	—	—	12	6	6	6
3½-inch brick wall, against the combustible wall	—	—	—	—	24	12	6	5

For SI: 1 inch = 25.4 mm, °C. = [(°F.)-32]/1.8, 1 pound per cubic foot = 16.02 kg/m³.

^a Mineral wool bats (blanket or board) shall have a minimum density of 8 pounds per cubic foot and have a minimum melting point of 1,500°F. Insulation material utilized as part of a clearance reduction system shall have a thermal conductivity of 1.0 (Btu · in.)/(sq. ft. · hr. · °F.) or less. Insulation board shall be of noncombustible material.

Chapter 11

N1101.2.1 Delete N1101.2.1.1 and substitute the following:

N1101.2.1 Residential Buildings Type A-1. Compliance shall be demonstrated by either:

1. Meeting the requirements of the Rhode Island Energy Conservation Code SBC-8 ; or
2. Meeting the following prescriptive requirements based on location within the state and amount of exterior window area.

For the Communities in Providence County only:

Window area percentage Of exterior wall area	Max Glazing U-Factor	Min Ceiling R-Value	Min Exterior R-Value	Min Floor R-Value	or	Min Basement wall R-Value
0-10%	0.40	R-38	R-11	R-19	or	R-10
10.01-17.50%	0.40	R-38	R-13	R-19	or	R-10
17.51-25%	0.40	R-49	R-19	R-30	or	R-10

For Communities in All other Counties:

Window area percentage Of exterior wall area	Max Glazing U-Factor	Min Ceiling R-Value	Min Exterior R-Value	Min Floor R-Value	or	Min Basement Wall R-Value
0-10%	0.40	R-30	R-11	R-19	or	R-10
10.01-17.5%	0.40	R-38	R-13	R-19	or	R-10
17.5-25%	0.40	R-49	R-13	R-19	or	R-10

- Notes:
1. If window area exceeds 25% of gross exterior wall area, the provisions of SBC- 8 State Energy Conservation Code Chapters 5 and 6 prevail.
 2. R-Value 10.0 insulation shall be installed for slab on grade structures from grade to 4' below grade in Providence County and 2' below grade elsewhere and shall be protected against physical damage in accordance with Section R403.3.1. The maximum amount of uninsulated foundation above grade shall be 16".
 3. Sliding glass doors and fully glazed patio doors shall be considered windows for the purpose of this table.
 4. Roof/ceiling assemblies in which the finished interior surface is the underside of the roof sheathing, or where the finished ceiling surface is attached to the underside of the roof framing member (i.e. cathedral ceilings), shall have a minimum R-value of 19 insulation

- provided the exterior walls of the structure have an insulation value of R-19 or better, and the glass U-factor is a maximum of 0.35.
5. Mass walls shall meet the R-value requirements of Section N 1102.1.1.1
 6. Skylights and roof windows shall have a maximum U factor of 0.50.
 7. Foundation walls enclosing basements with conditioned space shall have a maximum of 16" exposed above grade without insulation.

N1103.3 Delete and substitute the following:

N1103.3 Duct Insulation:

All portions of the air distribution system shall be installed in accordance with section M1601 and be insulated as stated below:

Unconditioned Attic space	R-5
Unconditioned Cellar or Basement Space:	
Return Duct	None required
Supply Duct	R-3.3
Located Outside of the Building	R-8
When located within exterior walls R-8 shall be applied between the duct and the exterior sheathing.	

Exceptions: Duct insulation, except as required to prevent condensation, is not required in the following cases.

1. Exhaust air ducts.
2. When supply or return air ducts are installed in basements or cellars having insulated walls.
3. Air distribution system within appliances or equipment.

Chapter 12

M1201.1 Delete M1201.1 Scope and substitute the following:

M1201.1 Scope. The provisions of Chapters 12 through 24 shall regulate the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions within buildings. These chapters shall also regulate those mechanical systems, system components, equipment and appliances specifically addressed in this code.

In addition, any requirements for which provisions have not been made in chapters 12 through 24 shall be subject to the provisions of the State Mechanical Code SBC-4.

Chapter 14

M 1401.3 Delete M1401.3 and substitute the following:

M 1401.3 Sizing. Heating and cooling equipment shall be sized based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling methodologies. To recognize equipment sizing availability and to provide for future additions, equipment shall be sized so as not to exceed 200% of the submitted building load calculations.

M 14.11.4 Delete M1411.4 and substitute the following:

M 14.11.4 Insulation of refrigerant piping. Piping and fittings for refrigerant vapor (suction) lines shall be insulated with insulation having a thermal resistivity of at least $R=4.0-3.0 \text{ hr.} - \text{ft}^2 \text{ F/BTV}$ and having external surface permeance not exceeding 0.05 perms $[2.87 \text{ mg./ (s.m}^2\text{Pa)}]$ when tested in accordance with ASTM E 96.

Chapter 16

M1601.3.1 Add the following exceptions to M1601.3.1

Exception: Flexible air ducts shall be permitted to be joined with or without tapes using approved mechanically fastened tension straps or flexties installed with a tensioning gun or other similar technologies.

M 1602.3 (4) Add the following exception to M1602.3(4)

Exception: return air shall be permitted to be taken from locations such as a kitchen or garage which is provided its own separate and individual system providing 100% of the supply air for that space.

Chapter 18

To M1801.3.1 Size add the following exception:

Exception: Appliances with an AFUE rating below 85% shall be permitted to be installed in existing unlined chimneys, providing the flue chamber is cleaned and inspected and acceptable for continued use.

Chapter 22

Add the following exception to M2201.1 Materials.

Exception: Non-metallic storage tanks shall meet the requirements of UL subject 2258 and shall be installed in accordance with manufacturer's instructions.

M2204.5 Add the following code section:

M2204.5 Emergency Disconnect Switch. When an oil fired heating appliance is located inside a structure, a remote means of shutting off power to the oil pump and firing circuit in addition to the serviceman's switch shall be provided as follows:

1. When the appliance is located in an unfinished basement or cellar, an additional shutdown switch shall be installed at the entrance to the basement at the top of the stairs, located on either side of any door.
2. When the appliance is located in a separately dedicated utility room, the switch shall be located outside the room immediately adjacent to its entrance.
3. When the appliance is located in a crawl space or attic, the switch shall be located immediately outside the entrance to the crawl space or attic area.

The switch shall be located on a wall mounted between 60" and 80" above the floor surface and be identified with a red cover plate suitably identified as to its purpose.

Chapter 24

Add the following to precede Chapter 24, Fuel Gas:

G2400 Coordination. The provisions of this Chapter shall be used in conjunction with the provisions of the State Fuel Gas Code SBC-19.

G2424.15 Add the following exception to G2424.5:

Exception: Replacement appliances with an AFUE rating below 85% shall be permitted to be installed in existing unlined chimneys, providing the flue chamber is cleaned and inspected and acceptable for continued use.

Chapter 25

P-2501.1 Delete 2501.1 and substitute the following.

P2501.1 Scope. The provisions of this chapter shall govern the installation of plumbing not specifically covered in other chapters applicable to plumbing systems. In addition, any requirements for which provisions have not been made in chapters 26 through 32 shall be subject to the Provisions of the State Plumbing Code SBC-3.

P2503.4 Delete P2503.4 Building Sewer Testing without substitution.

P2503.5.2 Delete P2503.5.2 Finished Plumbing and substitute the following:

P2503.5.2 Finished Plumbing. After the plumbing fixtures have been set and then traps filled with water, their connections shall be tested and proved water tight by filling and then draining each fixture and their traps and fixture connections proven tight by visual inspection.

P2503.7 Delete P2503.7 Inspection and Testing of backflow prevention devices along with P2503.7.1 and P2503.7.2 in their entirety without substitution.

Chapter 26

P2603.5 Add the following exception to P2603.5 Pipes through footings or foundation walls:

Exception: PVC schedule 40 minimum pipe shall not be required to be sleeved or be provided with a relieving arch.

P2603.6 Add the following exception to P2603.6 Freezing:

Exception: Soil and vent stacks located within exterior walls and vent pipes in attics shall not be required to be insulated.

Chapter 29

P2903.3 Delete P2903.3 Minimum Pressure and substitute the following:

P2903.3 Minimum Pressure. Minimum static pressure shall be 40 psi measured before any meter, or a booster pump shall be installed after the meter providing 40 psi minimum static pressure. For private wells, 40 psi minimum shall be provided at the outlet of any storage tank or pump.

Delete chapters 33 through 42 of the International Residential Code, in its entirety and use the provisions of the National Electrical Code, 2002 edition, SBC-5, for the design and installation of electrical systems in all 1 and 2 family dwellings.

Appendices

Appendix E Delete AE101.1 and substitute the following

AE101.1 General. These provisions shall be applicable only to a manufactured home used as a single dwelling unit and shall apply to the following:

1. Construction, alteration and repair of any foundation system which is necessary to provide for the installation of a manufactured home unit.
2. Construction, installation, addition, alteration, repair or maintenance of the building service equipment which is necessary for connecting manufactured homes to water, fuel, or power supplies and sewage systems.
3. Alterations, additions or repairs to existing manufactured homes. The construction, alteration, moving, demolition, repair and use of accessory buildings and structures and their building service equipment shall comply with the requirements of the codes adopted by this jurisdiction.

These provisions shall not be applicable to the design and construction of manufactured homes and shall not be deemed to authorize either modifications or additions to manufactured homes where otherwise prohibited.

Exception: In addition to these provisions, new and relocated manufactured homes to be located in flood hazard areas as established in Table R301.2 of this code shall meet the applicable requirements of Sections R327.

AE102.6 Delete and substitute the following:

AE102.6 Relocation. Manufactured homes which are to be relocated within this jurisdiction shall comply with these provisions.

Existing units shall be installed and anchored in accordance with the manufacturer's installation instructions and this code. In the absence of specific manufacturer installation instructions, see SBC-7 for prescriptive installation details.

AE 303 and 304 Delete Sections 303 and 304 and substitute the following:

AE 303 Permit issuance – See SBC-1 and Section R105

AE 304 Fees. See SBC-1

Appendix G

Add the following new Section AG 103.3 Water Treatment

AG103.3 Water Treatment: Circulation systems shall be of adequate size to turn over the entire pool content at least once every 12 hours for private swimming pools. Circulation system equipment shall be designed to provide the proper turnover rate based upon the manufacturer's recommended maximum flow rate of the filter, in clean media condition.

Add the following new Appendix L

Appendix L

- L101.1 General.** This appendix contains prescriptive solutions for compliance on wind path load transfer requirements, and shall be used only within the limitations of section L101.2.
- L101.2 Conditions of use.** The prescriptive solutions specified in the following sections shall not be permitted to be used in the following conditions:
1. Buildings and structures of any size in 110 MPH or 120 MPH wind zones located in a V zone as determined by community FIRMS.
 2. Two or more story buildings and structures of any size located in 120 MPH wind zone with more than 20% exterior fenestration.
 3. Two or more story structures with a building height greater than 33' as measured from Grade Plane to the average height of the highest roof surface.
 4. Any two or more story structure or building with opening fenestration greater than 40% on any one wall.

L202 Roofs

- L202.1 Scope.** The following applies to structures conventionally framed or to truss-type roofs.
- L202.2 Roof Sheathing.** Roof sheathing shall be not less than 7/16" finished thickness.
- L202.3 Roof nailing.** Roof attachment shall be accomplished with minimum 8d nails as follows:
1. In the 4 foot perimeter edge zone along the edges: 6" o/c
 2. To the intermediate supports within the 4 foot perimeter edge zone: 6" o/c
 3. Along the gable end wall or rake: 4" o/c
 4. All other areas: 6" o/c edge; 12" o/c intermediate.

All sheathing edges within the 4-foot perimeter edge zone shall be blocked with 2x3 minimum edgewise including the ridge line and soffit/fascia area. Provisions for ventilation air shall be maintained.

L202.4 Ridge Straps. Ridge straps 1-1/4" x 20 gage shall be attached to each pair of opposing rafters with 5-8d nails at each end into the framing member.

Exceptions:

1. Ridge straps are not required when collar ties of nominal 1 x 6 or 2 x 4 lumber are located within the upper third of the attic space and attached to each rafter with 3-10 d nails
2. Trusses without a framed ridge connection.
3. Plywood gussets of equivalent cross-section.
4. Other engineered connections.
5. At hips, straps shall be installed so each hip jack is connected across the hip line with at least 1-8d into an opposite framing member.

L202.5 Rake and eave overhangs. Overhangs shall be limited to 24". Ladder style rake overhangs attached to the gable end walls shall be limited to 12". Cantilevered rake overhangs at gable end walls shall be limited to 24".

L202.6 Roof assembly to wall assembly. A design wind load suction of 25 psf shall be used in conjunction with Table R802.11 to establish the required strength of rafter tie-down connections to withstand wind uplift forces.

Exception: Roof truss to wall connection shall be designed to withstand either the load requirements of Table R802.11 or the connection loads indicated on the truss design shop drawings, whichever is greater.

L203 Walls

L203.1 Wall sheathing. Wall sheathing shall be a minimum 7/16" structural panel. Nailing shall be in accordance with Table R602.3(1) and the following:

1. At the top plate or plates, the sheathing shall extend from the top of the top plate to a minimum of 16" beyond the stud-to-bottom of the top plate connection. A minimum of 4 nails shall be used at each stud fastening, and edge-nailed to each plate at 6" o/c.
Alternate: prefabricated and pre-engineered connection straps approved by the Building Official.
2. If the studs are not continuous to the foundation plate such as at an intermediate floor, the wall sheathing shall be continuous and uninterrupted for a distance of 16" beyond from top of bottom wall

plate to 16" beyond bottom of bottom wall top plate below, with a minimum of 4 nails at each stud, and field-nailed at 6" o/c to floor joist header framing.

Alternate: Prefabricated and pre-engineered connection anchors or fasteners approved by the Building Official.

3. At the bottom of the wall assembly to the foundation sill plate, the wall sheathing shall be continuous from a point 16" above the top of the bottom wall plate to the bottom of the foundation sill, with a minimum of 4 nails at each stud, 6" field nailed and edge nailed to the foundation sill plate at 6" o/c.

Alternate: Prefabricated pre-engineered connection anchors or fasteners approved by the Building Official.

L203.2 Shear Walls. A 4' segment of wall sheathing shall be designated as a shear wall at each corner of the structure at each floor, and every 24' maximum of wall length. The following additional requirements apply:

1. No openings are permitted within this 4' section.

Exception: Window openings are allowed no closer than 2' to corner providing the length of that shear panel is increased to 8'.

2. All edges shall be blocked and nailed at 6" o/c, and field-nailed at 6" o/c.
3. Studs shall be doubled at each end of the shear wall panel.

L-203.2.1 Shear wall holddowns. Shear walls shall be connected to the foundation or shear wall panel below with connection anchoring capable of 3500 lb. hold-down capacity, in addition to conventional foundation anchor bolt requirements in the remainder of the panel. The hold downs shall be fastened to each end of the shear wall at the double stud.

Exception: Shear wall holddowns shall not be required in wind zones I or II (100 mph or 110 mph).

L203.3 Foundation anchor bolts. Anchor bolts shall be installed in accordance with section R403.1.6 and the following:

1 + 2 story buildings – 1/2" @ 48" o/c or
5/8" @ 72" o/c

3 story building - 1/2" @ 24" o/c or
5/8" @ 36" o/c

Alternate: Prefabricated and pre-engineered connections in design and quantity sufficient to equal strength of anchor bolt specification above.

L203.4 Wall Framing.

L203.4.1. For wind zone 2 (110 mph) and zone 3 (120 mph) the following conditions apply:

1. Exterior bearing and non-bearing walls greater than 10' in height shall be 2 x 6 @ 16" o/c min.
2. Walls with a total height greater than 10' shall be permitted to use 2 x 4 @ 16" o/c providing the wall is limited to 10' in length and the individual studs are not greater than 9' in length.

L203.4.2 Garage doors. In wind zone 3 (120) mph garage doors shall be limited to 9' x 8' nominal.

L204 Deviations.

L204.1 Deviations. Deviations from the above prescriptive requirements shall only be permitted if stamped calculations and drawings are provided by a Rhode Island registered professional engineer for alternative connections.